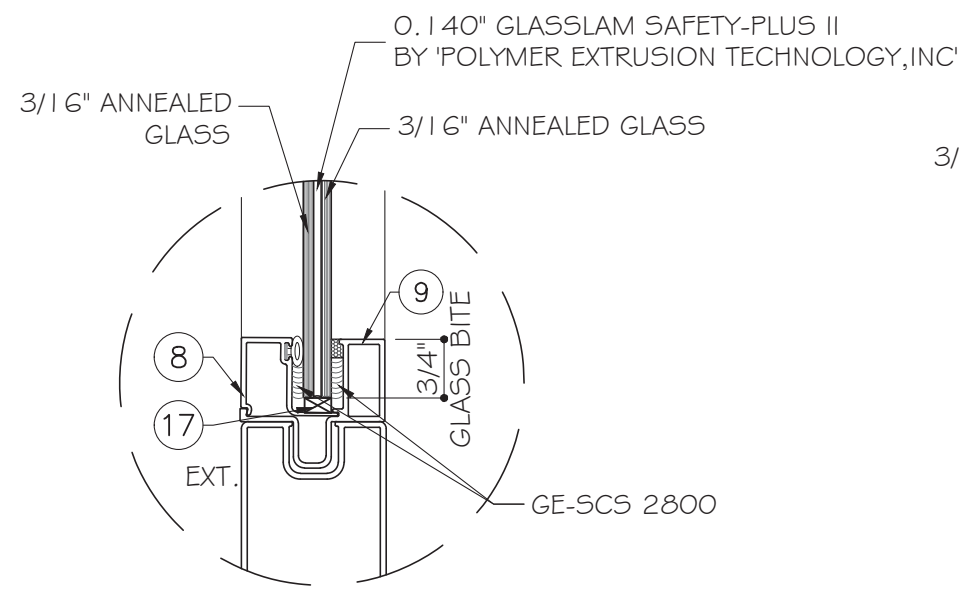
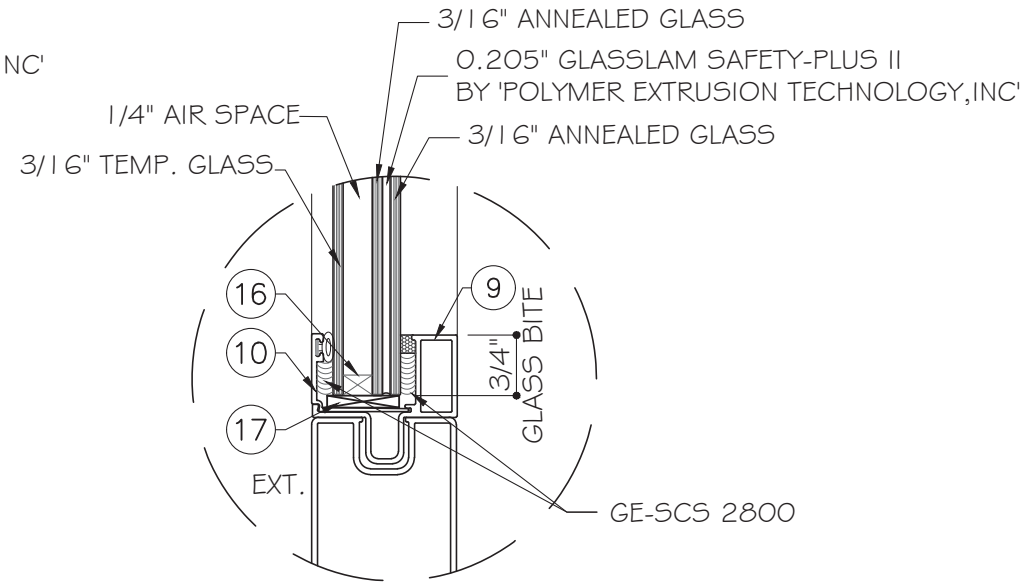


# SERIES FD 2100 OUTSWING FRENCH DOOR LARGE MISSILE IMPACT (LMI)



GLASS TYPE "G1"  
7/16" OVERALL LAM. GLASS



GLASS TYPE "G2"  
1" OVERALL INSUL. LAM. GLASS

**NOTE:**  
GLASS COMPLIES WITH ASTM E1300-09  
(3 SEC. GUSTS).

**GENERAL NOTES:**

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 7TH EDITION FLORIDA BUILDING CODE (2020)/8TH EDITION FLORIDA BUILDING CODE (2023) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- DOORS RATED FOR LARGE MISSILE IMPACT. IMPACT SHUTTERS ARE NOT REQUIRED.
- THESE DOORS ARE APPROVED FOR AIR AND WATER INFILTRATION.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 7TH EDITION FLORIDA BUILDING CODE (2020)/8TH EDITION FLORIDA BUILDING CODE (2023) SECTION AS APPLICABLE.
- METAL STRUCTURES NOT BY EMC WINDOWS AND DOORS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.
- ULTIMATE LOAD OBTAINED FROM ASCE 7-16/ASCE 7-22, MULTIPLY BY 0.6 SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.
- MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE LABELING TO COMPLY WITH SECTION 1709.9.2.

**INSTRUCTIONS:**

USE CHARTS AS FOLLOWS.

- STEP 1:** DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-16/ASCE 7-22 STANDARD.
- STEP 2:** SEE TYPICAL ELEVATION ON SHEET E1 & E2 FOR MAXIMUM SIZE AND DESIGN LOAD.
- STEP 3:** SEE ANCHOR TYPE ON SHEET A1. SEE SHEET E1 & E2 FOR ANCHOR SPACING.
- STEP 4:** THE LOWEST VALUE RESULTING FROM STEPS 2 THAT EXCEED THE DESIGN WIND PRESSURE DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.

**LIMITATIONS OF USE**

A- THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

C- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

D- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D.

E- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

FLORIDA APPROVAL:  
**FL # 29477.1**

<b>ABBREVIATIONS AND SYMBOLS</b>	
D.L.O. - DAYLITE OPENING	SECTION NUMBER 
F.H. - FRAME HEIGHT	
F.W. - FRAME WIDTH	SHEET NUMBER
W/ - WITH	
W/O - WITHOUT	
O.C. - ON CENTER	

**MCY ENGINEERING, INC.**  
GLAZING CONSULTANTS

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MIRAMAR, FL 33027 P: 305.271.0117

www.MCYEngineering.com MCY@mcyengineering.com

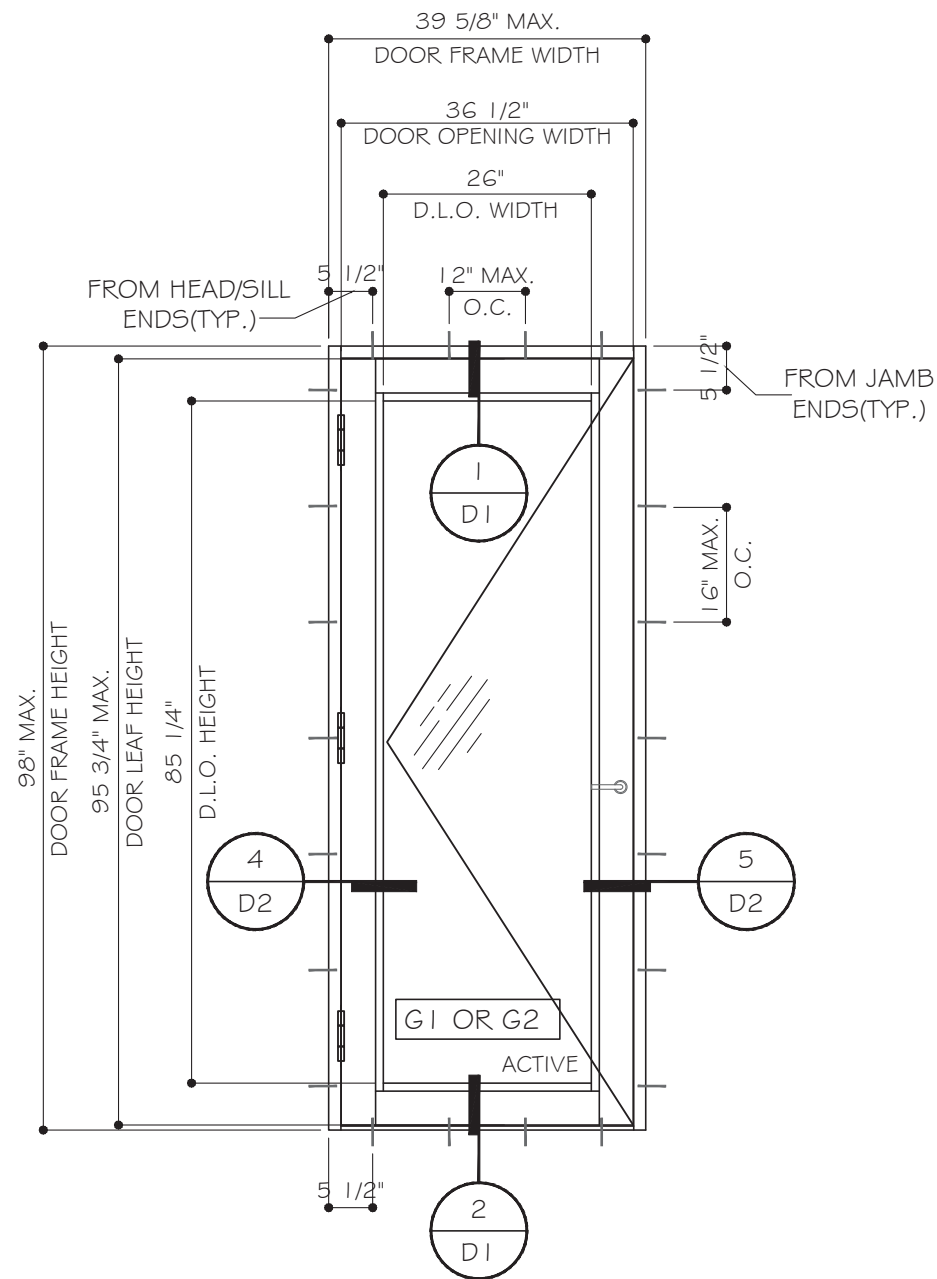
SERIES SF 2100 OUTSWING FRENCH DOOR - L.M.I.

**EMC WINDOWS AND DOORS, LLC.**  
1356 W. 76TH STREET  
HIALEAH, FL 33014

TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

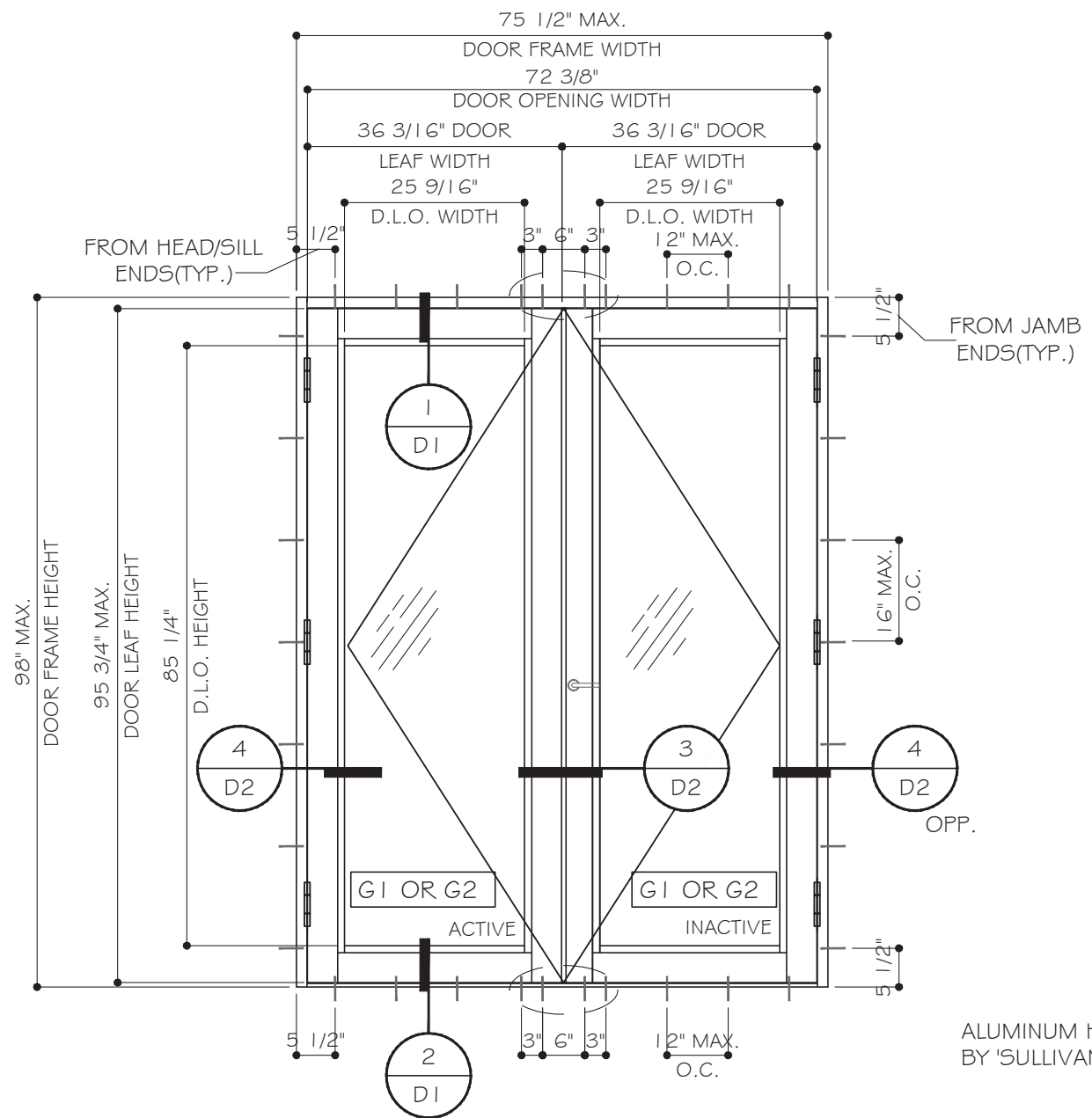
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R3	09.25.2023	James	2025 FBC

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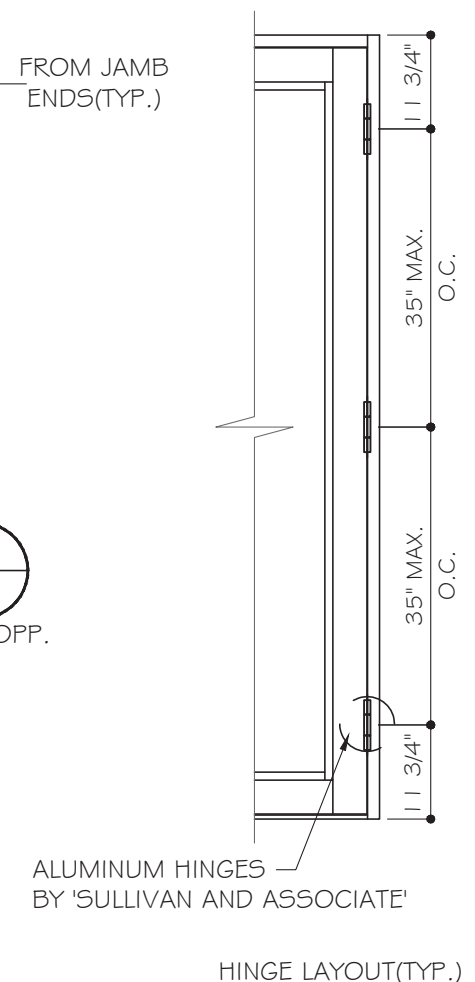
**SINGLE DOOR W/O SIDELITE (X)**  
TYPICAL EXTERIOR ELEVATION

MAX. DESIGN LOAD (FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBC)
+ 65 PSF - 65 PSF



**DOUBLE DOOR W/O SIDELITE (XX)**  
TYPICAL EXTERIOR ELEVATION

MAX. DESIGN LOAD (FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBC)
+ 65 PSF - 65 PSF



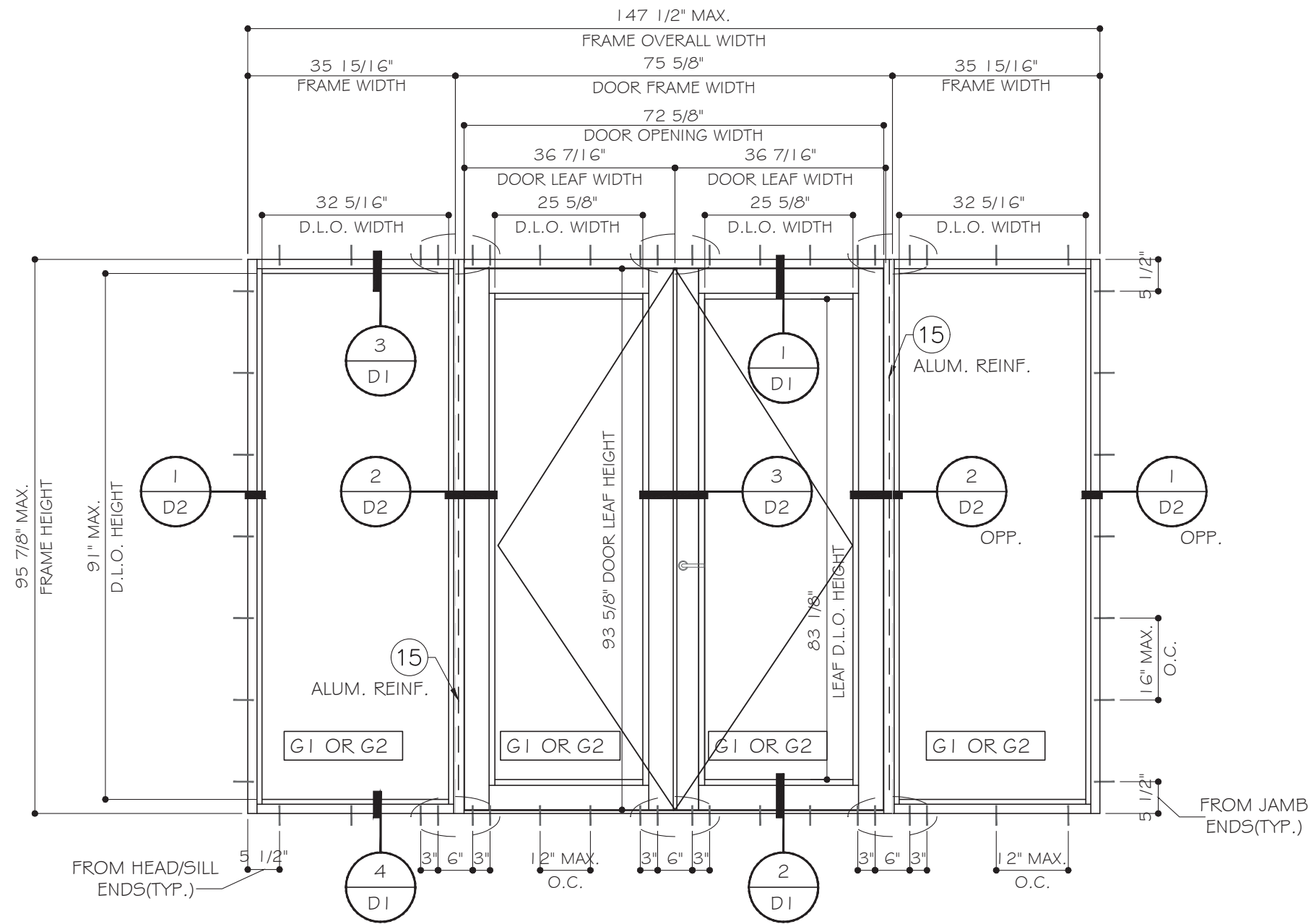
ALUMINUM HINGES  
BY 'SULLIVAN AND ASSOCIATE'

HINGE LAYOUT(TYP.)

FLORIDA APPROVAL:  
**FL # 29477.1**



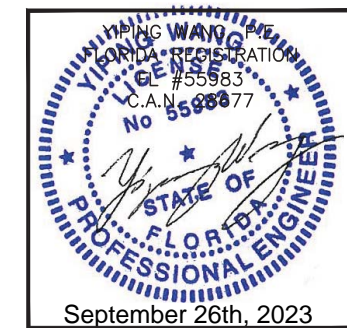
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TYPICAL EXTERIOR ELEVATION W/ SIDELITE (OXXO)

MAX. DESIGN LOAD (FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBC)	
UNREINF.	+/- 60 PSF
REINF.	+/- 65 PSF

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www.MCYEngineering.com MCY@mcycyengineering.com

**TYPICAL ANCHOR TYPES:**  
SEE ELEVATIONS FOR SPACING

TYPE "A": 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)  
INTO WOOD STRUCTURE  
WITH 1 1/2" MIN. EMBED

THRU 1 BY OR 2BY WOOD BUCKS INTO CONCRETE  
WITH 1 3/4" MIN. EMBED

THRU 1 BY OR 2BY WOOD BUCKS  
WITH 1 1/4" MIN. EMBED INTO HOLLOW BLOCK(JAMB ONLY)  
WITH 1 3/4" MIN. EMBED INTO GROUT FILLED BLOCK

DIRECTLY INTO CONCRETE(3000 psi MIN.)  
WITH 1 1/2" MIN. EMBED INTO CONCRETE

TYPE "B": 1/4" TEKS OR SELF DRILLING SCREW(GRADE 5) (Fu=120 KSI, Fy=92 KSI)  
INTO METAL STRUCTURE

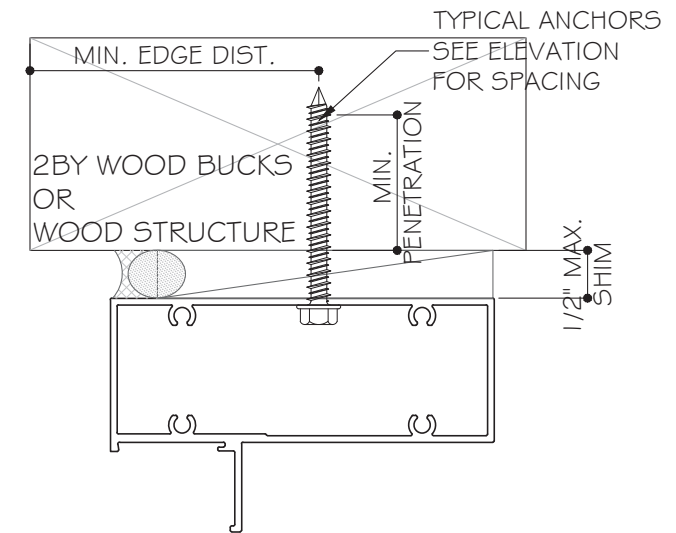
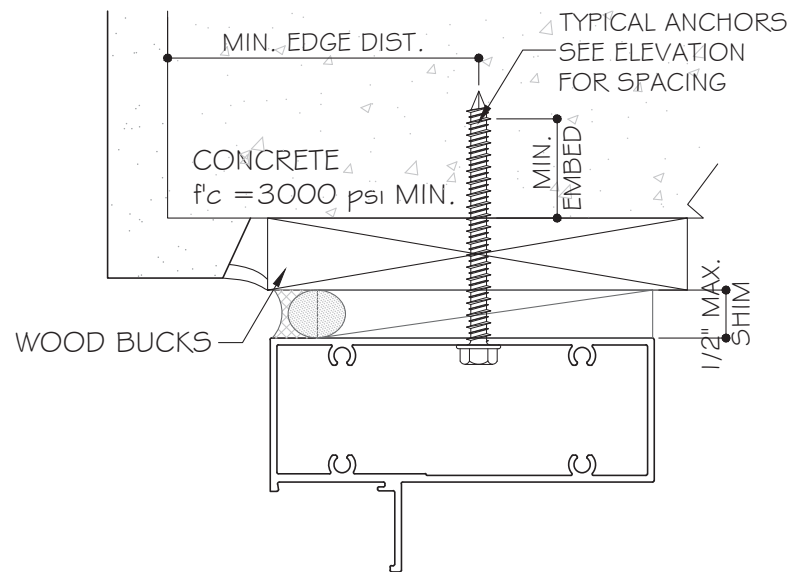
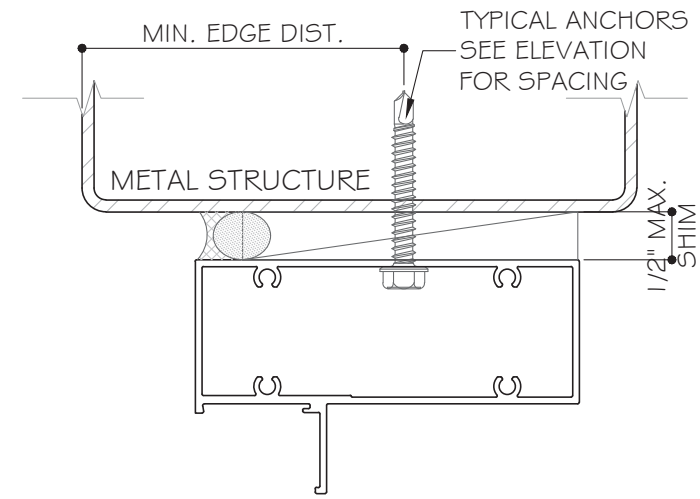
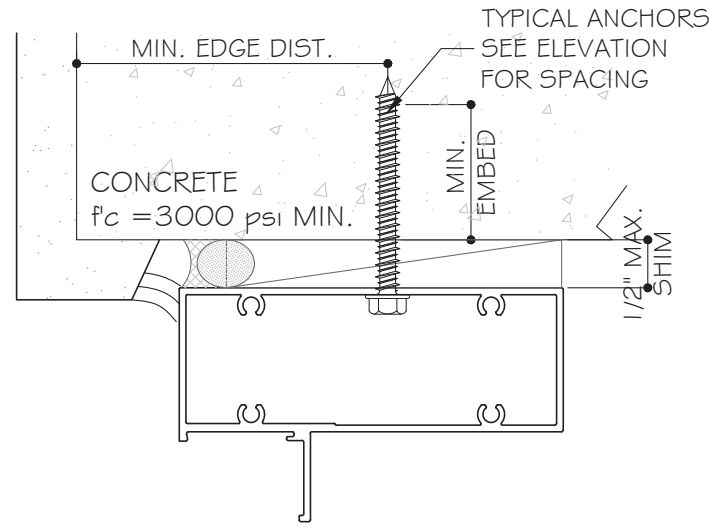
STEEL: 1/8" THK. MIN. (Fy=36 KSI MIN.)  
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
(STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED OR PLATED)  
(3) THREADS MIN. PENETRATION BEYOND METAL SUBSTRATE

TYPICAL ANCHOR EDGE DISTANCE:  
INTO CONCRETE OR GROUT FILLED & MASONRY = 2 1/2" MIN.  
INTO WOOD STRUCTURE = 1-1/2" MIN.  
INTO METAL STRUCTURE = 1" MIN.

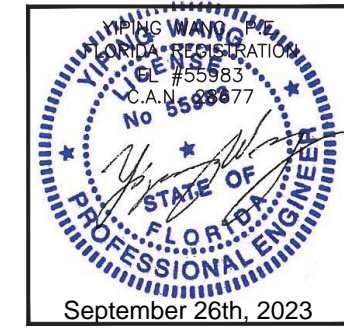
WOOD STRUCTURE / BUCK HEAD, SILL & JAMB: SG = 0.55 MIN.  
CONCRETE AT HEAD, SILL & JAMB: f'c = 3000 psi MIN.  
C-90 HOLLOW/FILLED BLOCK(JAMB ONLY): f'm = 2000 psi MIN.

SEALANTS:  
ALL FRAME CIBERS, JOINTS, MULLION SEMAS AND PERIMETER OF GLAZING  
BEAD TO FRAME SEALED WITH SILICONE SEALANT (DOWSIL 775)

1X OR 2X WOOD BUCKS AND METAL STRUCTURES NOT BY EMC WINDOWS AND DOORS MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



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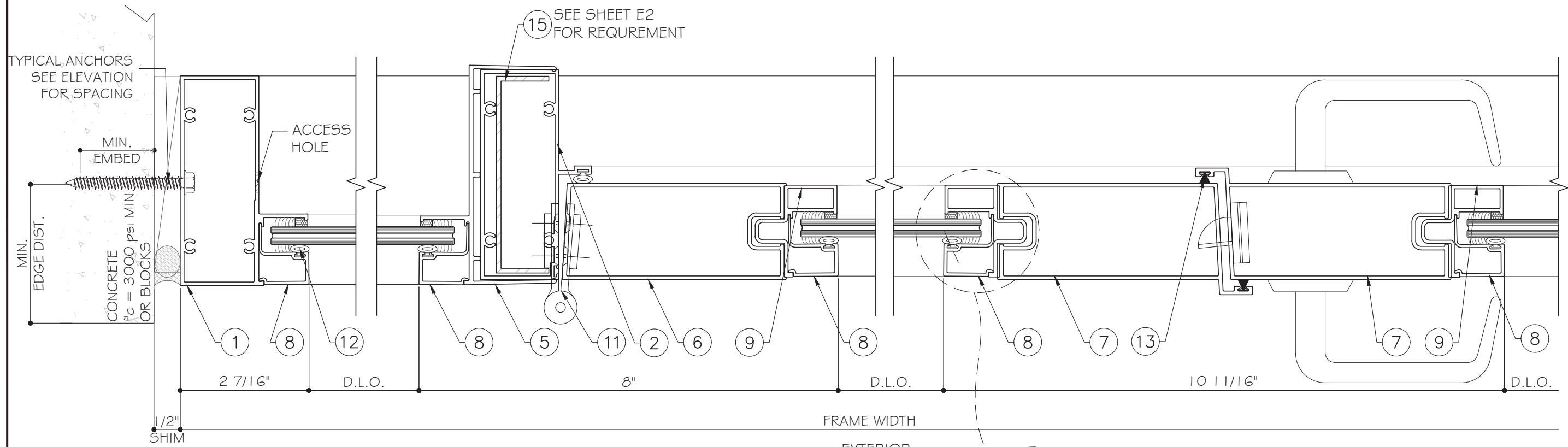


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TEL: (305) 283-6280 EMCWindowsDoors@gmail.com

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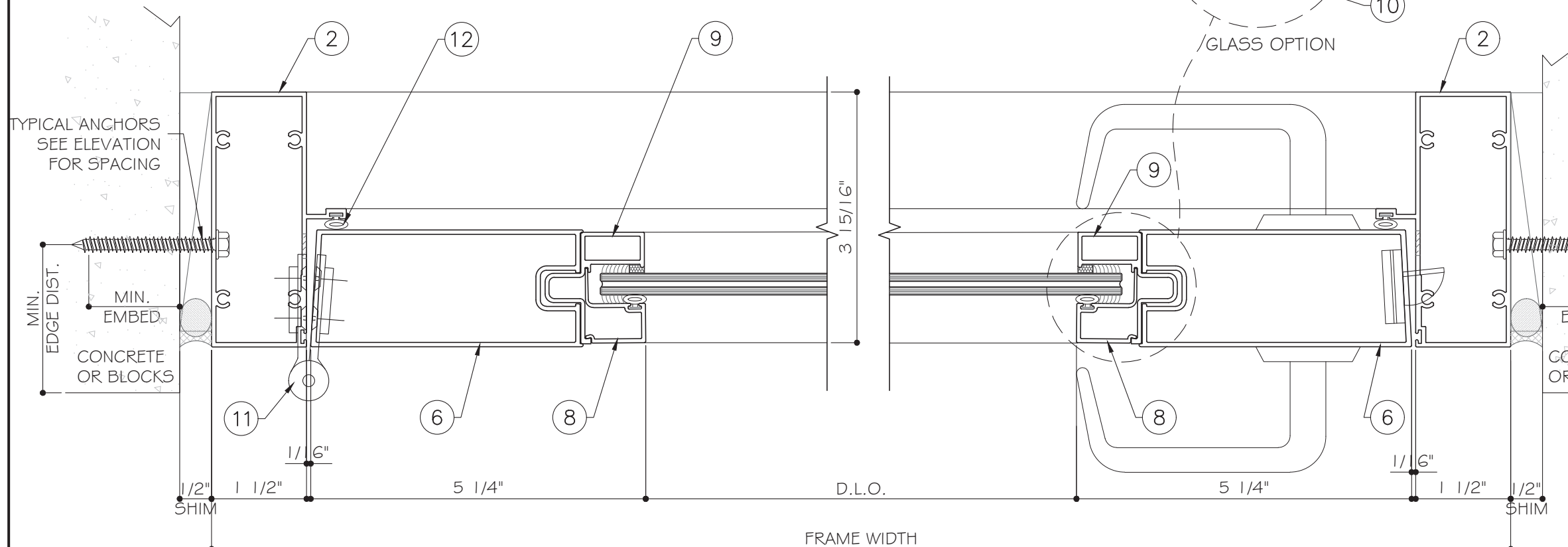
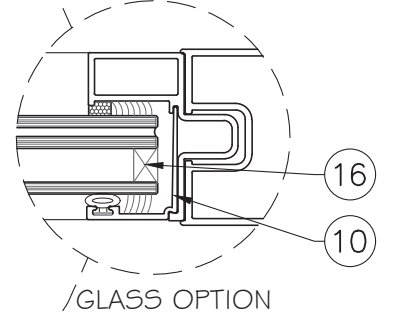




1  
D2  
DETAIL

2  
D2  
DETAIL

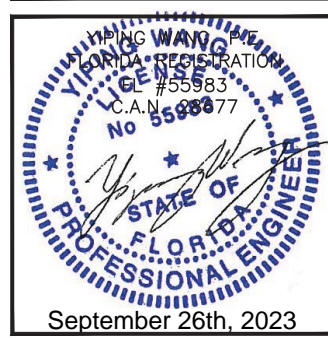
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4  
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DETAIL

5  
D2  
DETAIL

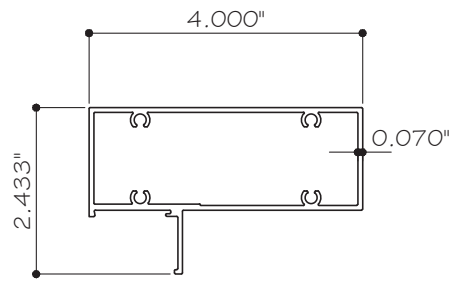
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FL # 29477.1



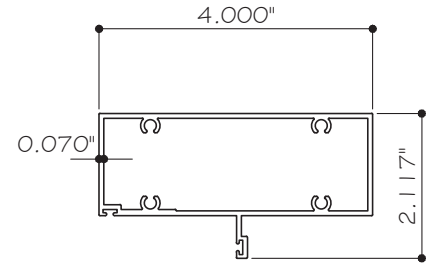
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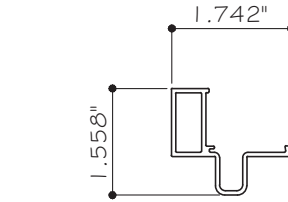
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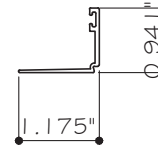
① SIDELITE HEAD/SILL/JAMB  
EMC-004 ALUM. 6063-T6



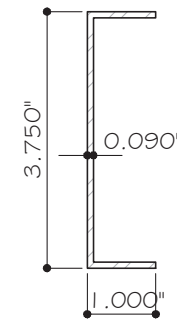
② DOOR HEAD/JAMB FRAME  
EMC-001 ALUM. 6063-T6



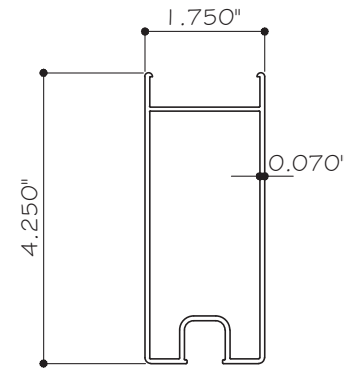
⑨ GLAZING ADAPTOR  
EMC-003 ALUM. 6063-T6



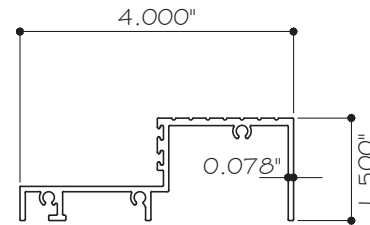
⑩ GLAZING BEAD FOR INSUL.-LAM. GLASS  
- ALUM. 6063-T6



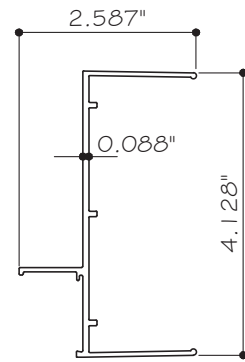
⑮ ALUM. CHANNEL REINFORCEMENT  
- ALUM. 6063-T6



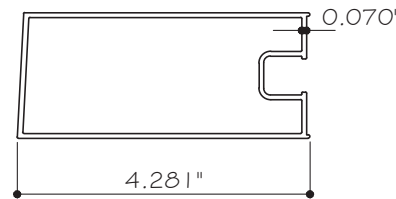
③ TOP/BOTTOM RAIL  
EMC-002 ALUM. 6063-T6



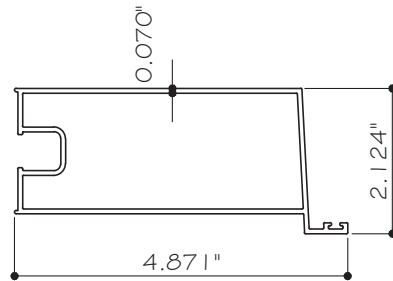
④ THRESHOLD  
EMCFD1 ALUM. 6063-T6



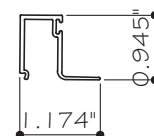
⑤ SIDELITE OPEN JAMB  
EMC-005 ALUM. 6063-T6



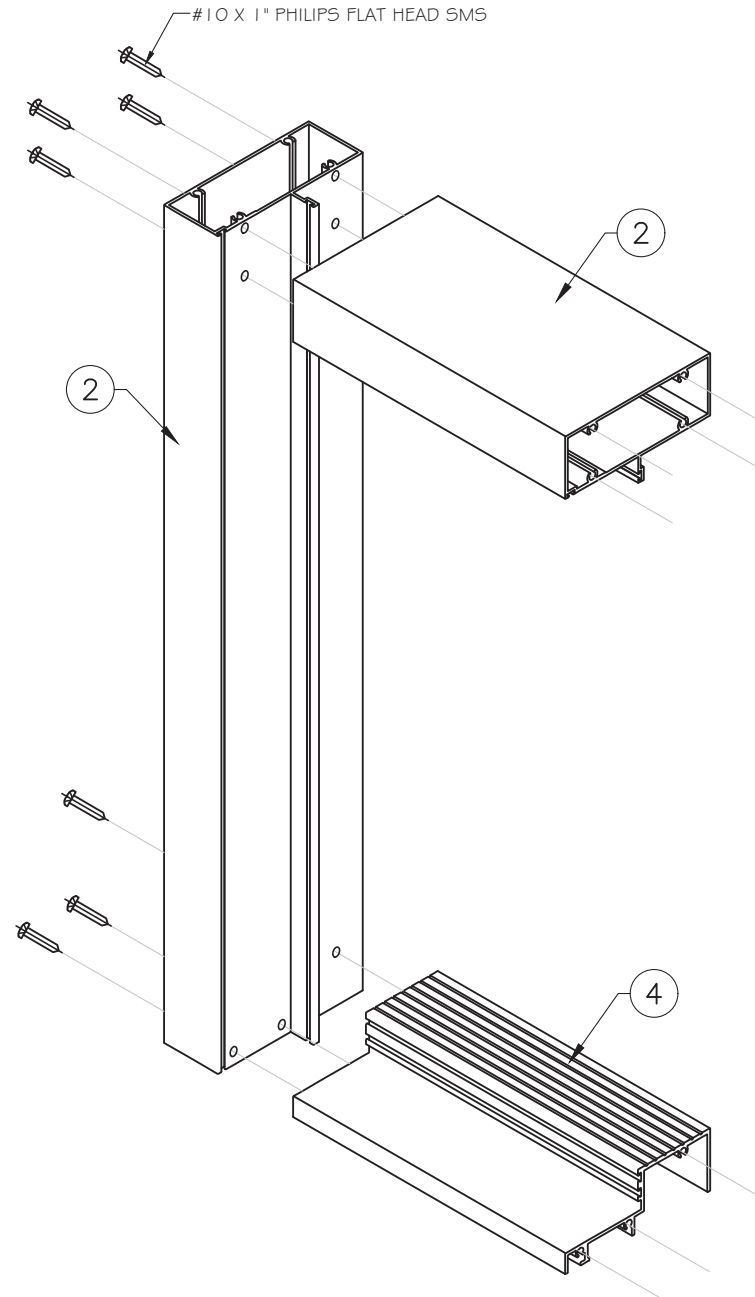
⑥ HINGE STILE  
EMCFD2 ALUM. 6063-T6



⑦ MEETING STILE  
EMCFD3 ALUM. 6063-T6

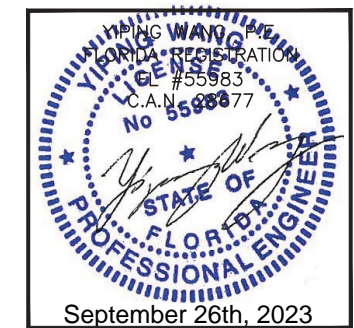


⑧ GLAZING BEAD FOR LAM. GLASS  
- ALUM. 6063-T6



DOOR FRAME CORNER ISOMETRIC DETAIL

FLORIDA APPROVAL:  
FL # 29477.1



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# BILL OF MATERIALS

ITEM	PART	DESCRIPTION	MATERIAL	MANUF. / REMARKS
1	EMC-004	SIDELITE HEAD/SILL/JAMB FRAME	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
2	EMC-001	DOOR HEAD/JAMB FRAME	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
3	EMC-002	TOP BOTTOM RAIL	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
4	EMCFD1	THRESHOLD	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
5	EMC-005	SIDELITE OPEN JAMB	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
6	EMCFD2	HINGE STILE	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
7	EMCFD3	MEETING STILE	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
8	-	GLAZING BEAD FOR LAMINATED GLASS	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
9	-	GLAZING ADAPTOR	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
10	-	GLAZING BEAD FOR INSULATED LAMINATED GLASS	ALUM. 6063-T6	EMC WINDOWS AND DOORS, LLC
11	-	ALUMINUM BUTT HINGE	-	SULLIVAN AND ASSOCIATES
12	NO. 3252B	BULB VINYL AIR SEAL GASKET(BLACK)	-	MELTPOINT PLASTICS
13	-	WEATHER STRIPPING	-	-
14	-	GASKET	-	-
15	-	1" X 3 3/4" X 1" X 0.090" THK. ALUM. CHANNEL REINFORCEMENT	ALUM. 6063-T6	-
16	-	CRL GRAY EDGETECH SUPER SPACER - GLASS SPACER	SILICONE FOAM	C.R. LAURENCE CO., INC.
17	-	SETTING BLOCK, DUROMETER 70±5	EPDM	-

**LOCKS:**

**ACTIVE LEAF:**

3 POINT LOCK BY 'SULLIVAN & ASSOCIATES' AT 42 1/4" FROM BOTTOM OF THE LEAF  
 A 1" X 1 1/4" X 1 5/8" ALUM. 7-RIB FLUSH BOLT GUIDE WAS FASTENED TO INACTIVE LEAF LOCKSTILE WITH  
 (2) #10 X 3/4" PFH SELF-DRILLING SMS

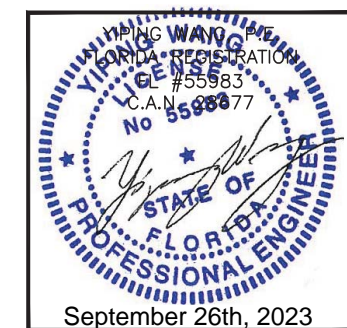
**INACTIVE LEAF:**

A SETS OF LEVER-ACITIVATED MANUAL SHOOT BOLTS BY 'SULLIVAN & ASSOCIATES' AT TOP/BOTTOM  
 A 1" X 1 1/4" X 1 5/8" ALUM. 7-RIB FLUSH BOLT GUIDE WAS FASTENED TO INACTIVE LEAF LOCKSTILE WITH  
 (2) #10 X 3/4" PFH SELF-DRILLING SMS

**HINGES:**

(3) ALUM. HINGES BY 'SULLIVAN AND ASSOCIATES'  
 AT 11 3/4" FROM TOP AND BOTTOM, 35" O.C.  
 FASTEN TO FRAME WITH  
 (3) #12 X 1" PFH SELF-DRILLING SMS  
 FASTEN TO LEAF WITH  
 (3) #12 X 1" PFH SELF-DRILLING SMS

FLORIDA APPROVAL:  
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